ETS runs for GO and more

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12 December 2016

Table of ETS runs

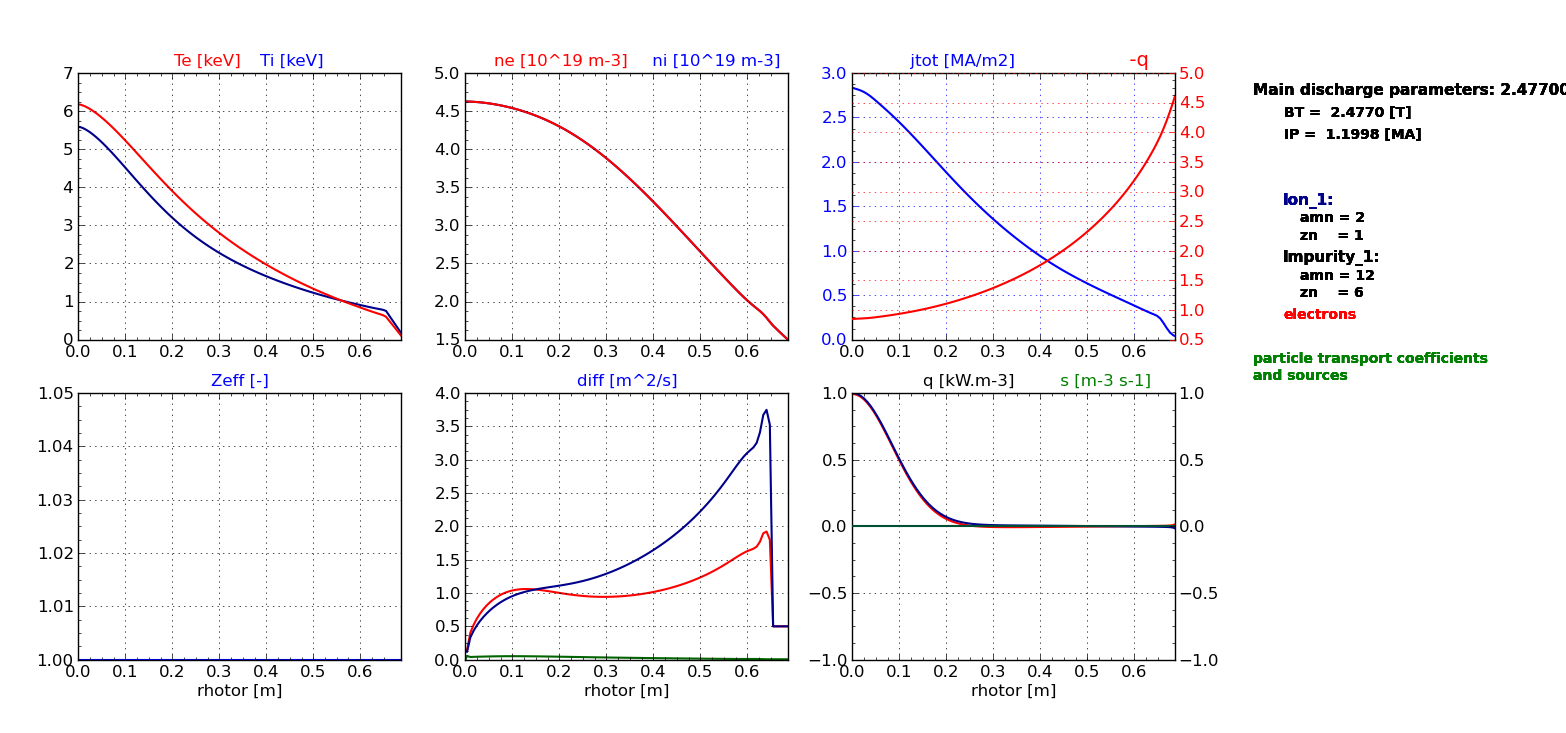
[euitm\_289060666 3](#__RefHeading__3400_1410421562)

[euitm\_289063000 5](#__RefHeading__3398_1410421562)

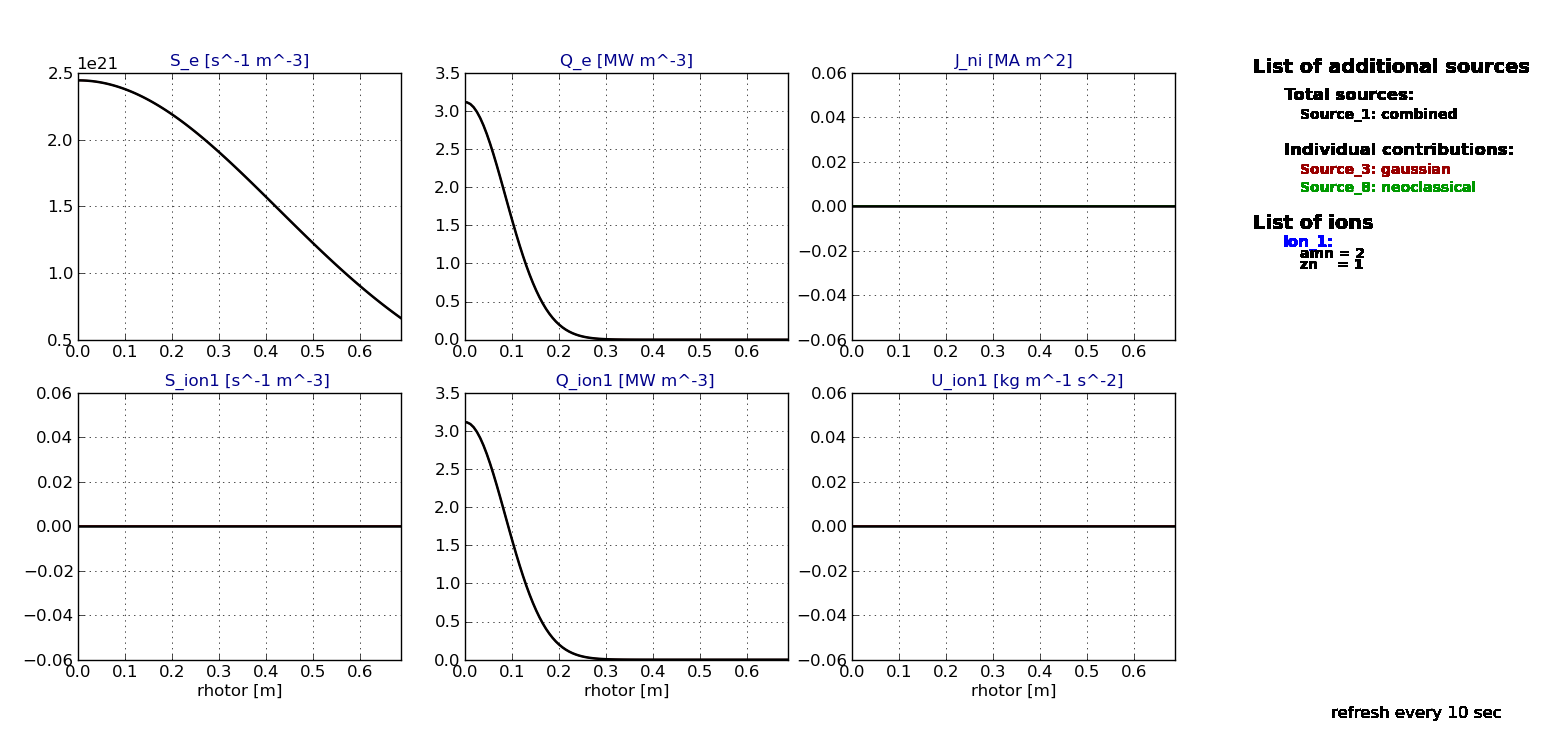
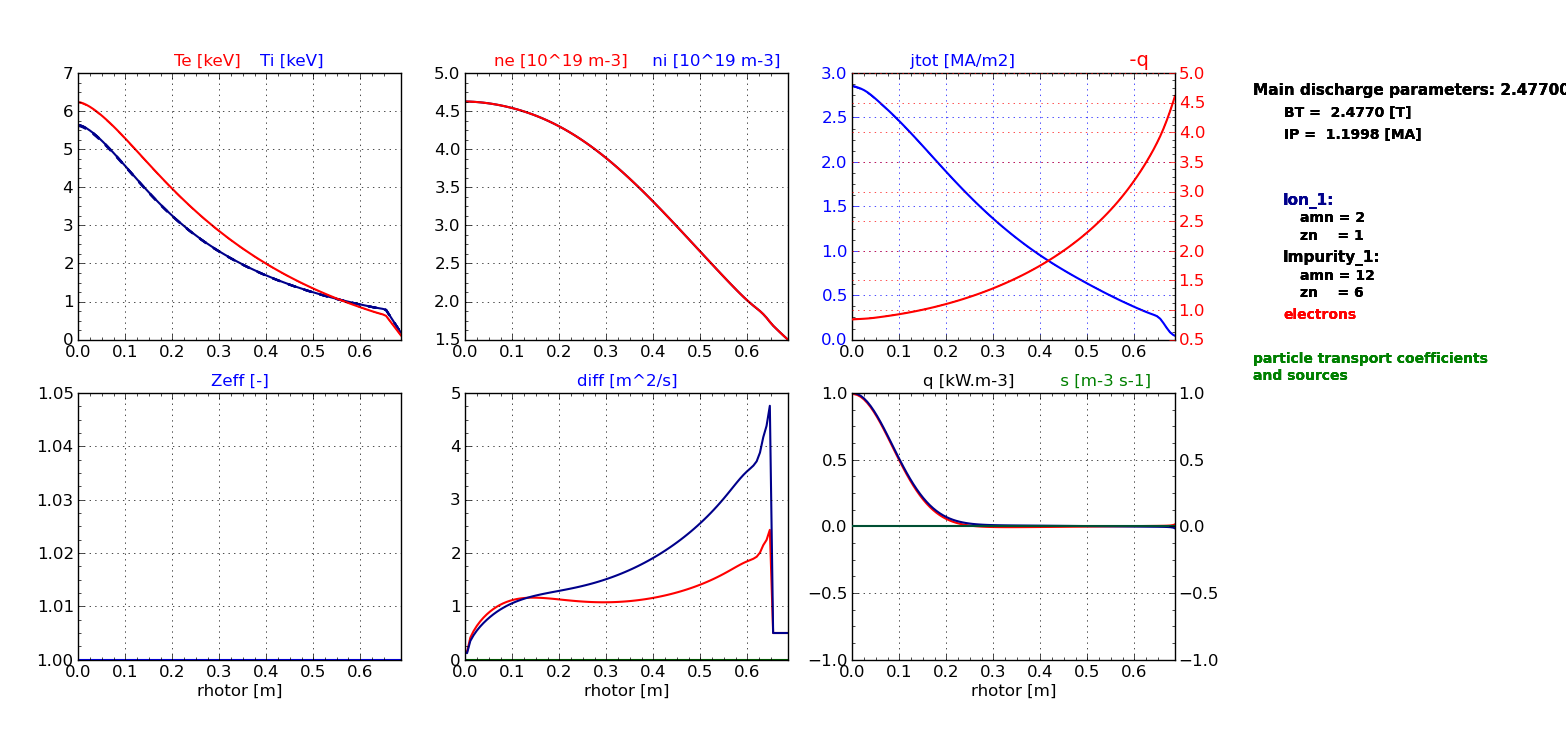
[euitm\_template 7](#__RefHeading__3612_1410421562)

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| |  |  | | --- | --- | | **euitm\_289060666** | **keplerworkflows/tags/ets\_cc\_split r814**  **ETS\_WORKFLOW.xml**  12 December 2016 |  |  |  |  | | --- | --- | --- | | **USER** | maradi | (*General parameters* in root) | | **machine** | aug | (*General parameters* in root) | | **shot\_in** | 28906 | (*General parameters* in root) | | **run\_in** | 7 | (*General parameters* in root) | | **run\_out** | 666 | (*General parameters* in root) | | **tau** | 0.01 | TAU | TAU\_OUTPUT (*BEFORE THE TIME EVOLUTION* composite actor) min\_tau: Minimum time step [s] | max\_tau: Maximum time step [s] (*Numerics* in root) | | **tbegin** | 0 | (*Times* in root) | | **tend** | 0.1 | (*Times* in root) |   gausiansources parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / Gausian Sources / GaussianSourcesON. / gausiansources*  **Edit code parameters**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | currents | | | **JNITOT** | 0.0E6 | | **RCURR** | 0.0 | | **FWCURR** | 2.0 | | |  |  | | --- | --- | | composition | | | **AMN** | 2.0 | | **ZN** | 1.0 | | **ZION** | 1.0 | | | |  |  | | --- | --- | | heating\_el | | | **WTOT\_el** | 1.5E6 | | **RHEAT\_el** | 0.0 | | **FWHEAT\_el** | 0.2 | | |  |  | | --- | --- | | heating | | | **WTOT** | 1.5E6 | | **RHEAT** | 0.0 | | **FWHEAT** | 0.2 | | | |  |  | | --- | --- | | particles\_el | | | **STOT\_el** | 2.0E22 | | **RPART\_el** | 0.0 | | **FWPART\_el** | 1.0 | | |  |  | | --- | --- | | particles | | | **STOT** | 0.0E21 | | **RPART** | 0.0 | | **FWPART** | 1.0 | | |  | |  |  | | --- | --- | | momentum | | | **UTOT** | 0.0 | | **RMOM** | 0.0 | | **FWMOM** | 1.0 | |   Runaway Fluid parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_Runaway\_in** | false | Runaway Fluid turned OFF | | **runafluid\_switch** | 1111 |  |   *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / HCDSources / HCDSourcesON. / HCD\_COREWithout internal params, i.e. all settings come as globalparameters set on an upper level / Distribution(one time slice distributionfuctionevaluation) / Elektron Fokker–Planckone time slice / Runaway electronsone time slice Runaway\_Fluid\_package*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_runafluid\_electric\_switch** | false | Electric field test module for Runaway Fluid turned OFF | | **runafluid\_electric\_field\_switch** | 1011 |  | | **runafluid\_electric\_field\_value** | 10 |  |  |  | | --- | | Steady state ETS run with default parameters | |

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| --- |
| *t* = 0.01 s |



|  |
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| *t* = 0.1 s |



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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **euitm\_289063000** | **keplerworkflows/tags/ets\_cc\_split r814**  **ETS\_WORKFLOW.xml**  13 December 2016 |  |  |  |  | | --- | --- | --- | | **USER** | maradi | (*General parameters* in root) | | **machine** | aug | (*General parameters* in root) | | **shot\_in** | 28906 | (*General parameters* in root) | | **run\_in** | 7 | (*General parameters* in root) | | **run\_out** | 3000 | (*General parameters* in root) | | **tau** | 1E-6 | TAU | TAU\_OUTPUT (*BEFORE THE TIME EVOLUTION* composite actor) min\_tau: Minimum time step [s] | max\_tau: Maximum time step [s] (*Numerics* in root) | | **tbegin** | 0 | (*Times* in root) | | **tend** | 0.00217 | (*Times* in root) |   gausiansources parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / Gausian Sources / GaussianSourcesON. / gausiansources*  **Edit code parameters**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | currents | | | **JNITOT** | 0.0 | | **RCURR** | 0.0 | | **FWCURR** | 2.0 | | |  |  | | --- | --- | | composition | | | **AMN** | 2.0 | | **ZN** | 1.0 | | **ZION** | 1.0 | | | |  |  | | --- | --- | | heating\_el | | | **WTOT\_el** | -1.5E8 | | **RHEAT\_el** | 0.0 | | **FWHEAT\_el** | 0.5 | | |  |  | | --- | --- | | heating | | | **WTOT** | -1.0E8 | | **RHEAT** | 0.0 | | **FWHEAT** | 0.5 | | | |  |  | | --- | --- | | particles\_el | | | **STOT\_el** | 0.0 | | **RPART\_el** | 0.0 | | **FWPART\_el** | 1.0 | | |  |  | | --- | --- | | particles | | | **STOT** | 0.0 | | **RPART** | 0.0 | | **FWPART** | 1.0 | | |  | |  |  | | --- | --- | | momentum | | | **UTOT** | 0.0 | | **RMOM** | 0.0 | | **FWMOM** | 1.0 | |   Runaway Fluid parameters tags/4.10b.10\_1.2.0\_runaway\_fluid  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_Runaway\_in** | true | Runaway Fluid turned ON | | **runafluid\_switch** | 311 | Toroidicity: OFF, Avalanche: linear, Dreicer: H&C (63) |   *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / HCDSources / HCDSourcesON. / HCD\_COREWithout internal params, i.e. all settings come as globalparameters set on an upper level / Distribution(one time slice distributionfuctionevaluation) / Elektron Fokker–Planckone time slice / Runaway electronsone time slice Runaway\_Fluid\_package*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_runafluid\_electric\_switch** | false | Electric field test module for Runaway Fluid turned OFF | | **runafluid\_electric\_field\_switch** | 1011 |  | | **runafluid\_electric\_field\_value** | 10 |  |  |  | | --- | | Heat drain turned on both for ions and electrons  crash after time = 0.001286  runaways are indicated | |

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| --- |
| *t* = 0 s |

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| *t* = 0.1 s |

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| |  |  | | --- | --- | | **euitm\_289063001** | **keplerworkflows/tags/ets\_cc\_split r814**  **ETS\_WORKFLOW.xml**  XX December 2016 |  |  |  |  | | --- | --- | --- | | **USER** | maradi | (*General parameters* in root) | | **machine** | aug | (*General parameters* in root) | | **shot\_in** | 28906 | (*General parameters* in root) | | **run\_in** | 7 | (*General parameters* in root) | | **run\_out** | 3001 | (*General parameters* in root) | | **tau** | 1E-6 | TAU | TAU\_OUTPUT (*BEFORE THE TIME EVOLUTION* composite actor) min\_tau: Minimum time step [s] | max\_tau: Maximum time step [s] (*Numerics* in root) | | **tbegin** | 0 | (*Times* in root) | | **tend** | 0.00217 | (*Times* in root) |   gausiansources parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / Gausian Sources / GaussianSourcesON. / gausiansources*  **Edit code parameters**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | currents | | | **JNITOT** | 0.0 | | **RCURR** | 0.0 | | **FWCURR** | 2.0 | | |  |  | | --- | --- | | composition | | | **AMN** | 2.0 | | **ZN** | 1.0 | | **ZION** | 1.0 | | | |  |  | | --- | --- | | heating\_el | | | **WTOT\_el** | -1.5E8 | | **RHEAT\_el** | 0.0 | | **FWHEAT\_el** | 2.0 | | |  |  | | --- | --- | | heating | | | **WTOT** | -1.0E8 | | **RHEAT** | 0.0 | | **FWHEAT** | 2.0 | | | |  |  | | --- | --- | | particles\_el | | | **STOT\_el** | 0.0 | | **RPART\_el** | 0.0 | | **FWPART\_el** | 1.0 | | |  |  | | --- | --- | | particles | | | **STOT** | 0.0 | | **RPART** | 0.0 | | **FWPART** | 1.0 | | |  | |  |  | | --- | --- | | momentum | | | **UTOT** | 0.0 | | **RMOM** | 0.0 | | **FWMOM** | 1.0 | |   Runaway Fluid parameters tags/4.10b.10\_1.2.0\_runaway\_fluid  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_Runaway\_in** | true | Runaway Fluid turned ON | | **runafluid\_switch** | 311 | Toroidicity: OFF, Avalanche: linear, Dreicer: H&C (63) |   *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / HCDSources / HCDSourcesON. / HCD\_COREWithout internal params, i.e. all settings come as globalparameters set on an upper level / Distribution(one time slice distributionfuctionevaluation) / Elektron Fokker–Planckone time slice / Runaway electronsone time slice Runaway\_Fluid\_package*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_runafluid\_electric\_switch** | false | Electric field test module for Runaway Fluid turned OFF | | **runafluid\_electric\_field\_switch** | 1011 |  | | **runafluid\_electric\_field\_value** | 10 |  |  |  | | --- | | Heat drain turned on both for ions and electrons  crash after time = 2.65E-4  temperature is too low at the edge! | |

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| *t* = 0.01 s |

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| *t* = 0.1 s |

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| |  |  | | --- | --- | | **euitm\_289063002** | **keplerworkflows/tags/ets\_cc\_split r814**  **ETS\_WORKFLOW.xml**  XX December 2016 |  |  |  |  | | --- | --- | --- | | **USER** | maradi | (*General parameters* in root) | | **machine** | aug | (*General parameters* in root) | | **shot\_in** | 28906 | (*General parameters* in root) | | **run\_in** | 7 | (*General parameters* in root) | | **run\_out** | 3002 | (*General parameters* in root) | | **tau** | 1E-6 | TAU | TAU\_OUTPUT (*BEFORE THE TIME EVOLUTION* composite actor) min\_tau: Minimum time step [s] | max\_tau: Maximum time step [s] (*Numerics* in root) | | **tbegin** | 0 | (*Times* in root) | | **tend** | 0.00217 | (*Times* in root) |   gausiansources parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / Gausian Sources / GaussianSourcesON. / gausiansources*  **Edit code parameters**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | currents | | | **JNITOT** | 0.0 | | **RCURR** | 0.0 | | **FWCURR** | 2.0 | | |  |  | | --- | --- | | composition | | | **AMN** | 2.0 | | **ZN** | 1.0 | | **ZION** | 1.0 | | | |  |  | | --- | --- | | heating\_el | | | **WTOT\_el** | -1.5E8 | | **RHEAT\_el** | 0.0 | | **FWHEAT\_el** | 0.8 | | |  |  | | --- | --- | | heating | | | **WTOT** | -1.0E8 | | **RHEAT** | 0.0 | | **FWHEAT** | 0.8 | | | |  |  | | --- | --- | | particles\_el | | | **STOT\_el** | 0.0 | | **RPART\_el** | 0.0 | | **FWPART\_el** | 1.0 | | |  |  | | --- | --- | | particles | | | **STOT** | 0.0 | | **RPART** | 0.0 | | **FWPART** | 1.0 | | |  | |  |  | | --- | --- | | momentum | | | **UTOT** | 0.0 | | **RMOM** | 0.0 | | **FWMOM** | 1.0 | |   Runaway Fluid parameters tags/4.10b.10\_1.2.0\_runaway\_fluid  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_Runaway\_in** | true | Runaway Fluid turned ON | | **runafluid\_switch** | 311 | Toroidicity: OFF, Avalanche: linear, Dreicer: H&C (63) |   *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / HCDSources / HCDSourcesON. / HCD\_COREWithout internal params, i.e. all settings come as globalparameters set on an upper level / Distribution(one time slice distributionfuctionevaluation) / Elektron Fokker–Planckone time slice / Runaway electronsone time slice Runaway\_Fluid\_package*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_runafluid\_electric\_switch** | false | Electric field test module for Runaway Fluid turned OFF | | **runafluid\_electric\_field\_switch** | 1011 |  | | **runafluid\_electric\_field\_value** | 10 |  |  |  | | --- | | Heat drain turned on both for ions and electrons  crash after time = | |

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| *t* = 0.01 s |

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| *t* = 0.1 s |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **euitm\_template** | **keplerworkflows/tags/ets\_cc\_split r814**  **ETS\_WORKFLOW.xml**  XX December 2016 |  |  |  |  | | --- | --- | --- | | **USER** | maradi | (*General parameters* in root) | | **machine** | aug | (*General parameters* in root) | | **shot\_in** | 28906 | (*General parameters* in root) | | **run\_in** | 7 | (*General parameters* in root) | | **run\_out** | TEMPLATE | (*General parameters* in root) | | **tau** | 1E-6 | TAU | TAU\_OUTPUT (*BEFORE THE TIME EVOLUTION* composite actor) min\_tau: Minimum time step [s] | max\_tau: Maximum time step [s] (*Numerics* in root) | | **tbegin** | 0 | (*Times* in root) | | **tend** | 0.1 | (*Times* in root) |   gausiansources parameters  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / Gausian Sources / GaussianSourcesON. / gausiansources*  **Edit code parameters**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | currents | | | **JNITOT** | 0.0 | | **RCURR** | 0.0 | | **FWCURR** | 2.0 | | |  |  | | --- | --- | | composition | | | **AMN** | 2.0 | | **ZN** | 1.0 | | **ZION** | 1.0 | | | |  |  | | --- | --- | | heating\_el | | | **WTOT\_el** | 0.0 | | **RHEAT\_el** | 0.0 | | **FWHEAT\_el** | 0.2 | | |  |  | | --- | --- | | heating | | | **WTOT** | 0.0 | | **RHEAT** | 0.0 | | **FWHEAT** | 0.2 | | | |  |  | | --- | --- | | particles\_el | | | **STOT\_el** | 0.0 | | **RPART\_el** | 0.0 | | **FWPART\_el** | 1.0 | | |  |  | | --- | --- | | particles | | | **STOT** | 0.0 | | **RPART** | 0.0 | | **FWPART** | 1.0 | | |  | |  |  | | --- | --- | | momentum | | | **UTOT** | 0.0 | | **RMOM** | 0.0 | | **FWMOM** | 1.0 | |   Runaway Fluid parameters tags/4.10b.10\_1.2.0\_runaway\_fluid  *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_Runaway\_in** | true | Runaway Fluid turned ON | | **runafluid\_switch** | 311 | Toroidicity: OFF, Avalanche: linear, Dreicer: H&C (63) |   *CONVERGENCE  LOOP. / Update SOURCE and IMPURITY / HCDSources / HCDSourcesON. / HCD\_COREWithout internal params, i.e. all settings come as globalparameters set on an upper level / Distribution(one time slice distributionfuctionevaluation) / Elektron Fokker–Planckone time slice / Runaway electronsone time slice Runaway\_Fluid\_package*  **Configure**   |  |  |  | | --- | --- | --- | | **Use\_runafluid\_electric\_switch** | false | Electric field test module for Runaway Fluid turned OFF | | **runafluid\_electric\_field\_switch** | 1011 |  | | **runafluid\_electric\_field\_value** | 10 |  |  |  | | --- | | Template | |

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| --- |
| *t* = 0.01 s |

|  |
| --- |
| *t* = 0.1 s |